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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,292	03/26/2004	Peter Davis	1048 022 301 0202	9263

37211 7590 03/29/2006

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EXAMINER

MAZZUCA JR, DOUGLAS

ART UNIT	PAPER NUMBER
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3726

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/810,292	DAVIS ET AL.	
	Examiner	Art Unit	
	Douglas E. Mazzuca	3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-12, 14, and 16-18 is/are rejected.
- 7) ☒ Claim(s) 5-6 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/09/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-18, drawn to an apparatus, classified in class 29, subclass 740.
 - II. Claims 19-20, drawn to a method, classified in class 29, subclass 832.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be practiced by another and materially different process such as a process which uses rollers on the component feeding system.
3. Because these inventions are independent or distinct for the reasons given above and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Duane C. Basch on 3/14/2006 a provisional election was made with traverse to prosecute the invention of group I, claims 1-18. Affirmation of this election must be made by applicant in replying to this Office action. Claim 19-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

1. The disclosure is objected to because of the following informalities:

On page 3, line 2; the word "an" should be deleted.

On page 10, line 19, the phrase "within a an" should read --within an--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
3. Claims 1-4, 7-12, 14, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rachkov et al. (US Patent No. 6,681,481) in view of Edwards (US Patent No. 3,387,906). In regard to claim 1, Rachkov et al. disclose the following:

A releasable, sliding mount for connecting a component feeding system to an assembly machine in a repeatable manner (**figure 1, 10**), comprising: a docking

channel (16) operatively affixed to the assembly machine (13), said docking channel including a pair of parallel grooves therein (**column 3 line 66-column 4 line 2**); a positioning member (**Figure 3, 36**) associated with a docking channel.

4. Rachkov et al. teach the use of a guide rail but fail to teach the use of rollers for inserting the component-feeding machine into the docking channel. However, Edwards, teaches a plurality of rollers (**figures 5 and 6, 34 and 36**) used for the reciprocal motion of a component. The rollers are received by grooves (**grooves formed by surfaces 81,83,82 and 84 in figure 6**) in a docking channel (14). The purpose of using rollers or wheels to move an object is to reduce friction between the component being moved, and the surface it is moving upon. This reduction in friction makes for easier reciprocal motion. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the rollers of Edwards in the sliding mount of Rachkov et al. in order to create a much smoother insertion and retraction of the component.

5. In regard to claims 2, and 7-9, Rachkov et al. disclose locking the component feeding system in a defined position using a positioning member (**figures 2 and 3, 36**). The positioning member contains a bracket (**figure 3,32**), a latch pin (**figure 3, 62 inserted in 38; can also be called a latching mechanism**) to control the inward position and relative motion of the component feeding system, and an alignment pin (**48**) for further alignment and positioning control.

6. Regarding claim 3, Rachkov et al. disclose a safety stop (**figures 2 and 3, 40**) for preventing the inadvertent removal of the component feeding system from the docking

channel (**column 4, lines 52-54**), wherein said safety stop is displaced so as to allow the component feeding system to be completely removed from the docking channel (**column 5, lines 12-14**).

7. In regard to claim 4, Rachkov et al. disclose the docking channel having a base plate (**figure 1, 12**) and at least two vertical members (**areas in between slots 16 extend vertically**).

8. Regarding claim 10, all of the claimed information is addressed above in paragraphs 3 and 4. Furthermore, Rachkov et al. teach a plurality of docking channels (**figure 1, 16; column 3 lines 48-49**) capable of receiving a plurality of component feeding systems.

9. Regarding claim 11,17, and 18, all of the claimed information is addressed in above paragraph 5.

10. Regarding claim 12, all of the claimed information is addressed in above paragraph 6.

11. Regarding claim 14, all of the claimed information is addressed in above paragraph 7.

12. Regarding claim 16, all of the claimed information is addressed in above paragraph 4.

13. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rachkov et al. (US Patent No. 6,681,481) in view of Edwards (US Patent No. 3,387,906) and further in view of APA (Applicants Admitted Prior Art). Rachkov et al. in view of Edwards teach all of the claimed information, yet fail to teach a plurality of "types" of

component feeding systems being used on the mounting device. However, Rachkov et al. disclose a mounting device for a micro-device feeder. Furthermore, Rachkov et al. disclose a plurality of docking channels for a plurality of micro-device feeders. APA teaches that there are many different types of micro-device feeders such as DDFs (Direct Die Feeders) and tape and reel feeders. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the mounting device of Rachkov et al. in view of Edwards to in order to accommodate a plurality of different types of component feeding systems as discloses by APA.

Allowable Subject Matter

14. Claims 5, 6, and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas E. Mazzuca whose telephone number is (571)272-7813. The examiner can normally be reached on 7:30AM-4PM Mon-Fri.

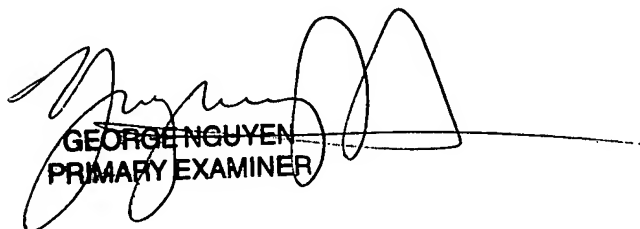
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Nguyen can be reached on (571)272-4491. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3726

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Douglas Mazzuca
March 17, 2006

DEM


GEORGE NGUYEN
PRIMARY EXAMINER